Arizona State Retirement System

Investment Program Report

September 21, 2012

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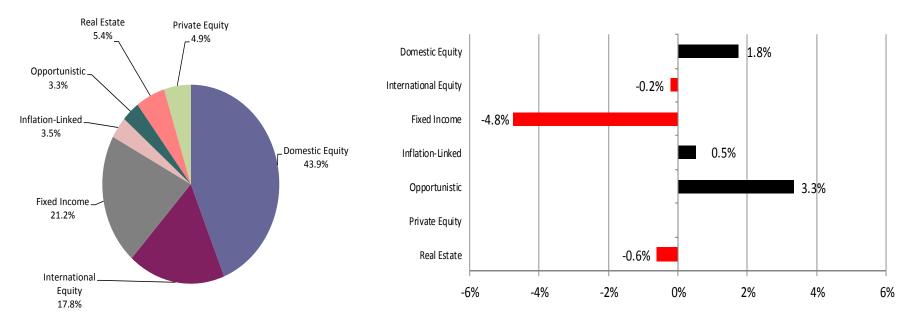


^{*}Evaluation period ending June 30, 2012

Total Fund Asset Allocation

Actual Portfolio - Assumed GTAA Allocation

Actual Portfolio – Assumed GTAA Allocation vs. Adjusted SAA Policy*



Note: Opportunistic TAA, Opportunistic PI, Real Estate and Private Equity market values are reported on a quarter-lag and adjusted to include the current quarter's cash flows. Within the Assumed GTAA Allocation vs. Adjusted SAA Policy chart, Private Equity was prorated to domestic equity.



^{*}Private Equity actual weight is equal to policy weight during the implementation of the asset class.

^{*}Over/Underweights include both GTAA positions as well as IMD tactical considerations.

ASRS Investment Goals

Macro • Goal #1: Achieve a total fund rate of return equal to or greater than the actuarial assumed interest rate.

- Goal #2: Achieve a total fund rate of return equal to or greater than the strategic asset allocation policy.
- Goal #3: Achieve a total fund rate of return equal to or greater than the amount projected in the most recent asset allocation study.
- Goal #4: Achieve asset class net rates of return equal to or greater than their respective broad asset class benchmarks.
- Goal #5: Achieve portfolio-level net rates of return equal to or greater than their respective portfolio benchmarks.
- Goal #6: Ensure sufficient monies are available to meet cash flow requirements.



Micro

Total Fund Performance

• Goal #1: Achieve a total fund rate of return equal to or greater than the actuarial assumed interest rate.

	20 Year Annualized Return
Total Fund	8.4%
Constant 8%	8.0%
Excess Return	0.4%

Goal Met: Yes



Total Fund Performance

 Goal #2: Achieve annual and three-year rolling annual rates of return equal to or greater than the return of the Strategic Asset Allocation Policy (SAA Policy)

	Quarter	1 Year	3 Years	5 Years	10 Years	Since Inception (6/30/75)
Total Fund	-2.1%	1.3%	13.2%	1.8%	6.3%	9.8%
Interim SAA Policy ¹	-1.6%	1.4%	12.6%	1.7%	6.0%	9.5%
Excess Return	-0.5%	-0.1%	0.6%	0.1%	0.3%	0.3%

1 Year Goal Met: No

3 Year Goal Met: Yes



Total Fund Attribution Analysis

Total Plan	1 Year	3 Years	5 Years
Allocation Effect ¹	-0.14	-0.03	-0.08
Manager Selection Effect ²	0.06	0.56	0.25
Residual ³	0.03	0.08	-0.08
Excess Return	-0.05	0.61	0.09

Source: State Street Investment Analytics

^{*}Pro-rates unfunded Private Equity allocation.



¹Contribution due to over/underweights relative to Interim* Strategic Asset Allocation Policy.

²Contribution due to manager selection (net) and interaction effect.

³Contribution due to activities not captured in Allocation and Manager Selection Effects.

Total Fund Attribution Detail

1 Year Excess Return: -0.1%

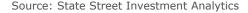
- Allocation Effect: -0.14%
 - Fixed Income tactical underweight (-0.65%)
 - Commodities tactical underweight (+0.26%)
 - International Equity tactical underweight (+0.13%)
 - GTAA tactical overweight (+0.13%)
- Manager Effect: +0.06%
 - Private Equity outperformed due to various managers (+0.31%)
 - Large Cap Equity underperformed due to INTECH, Jacobs Levy, and LSV (-0.18%)
 - Real Estate underperformed due to various managers (-0.09%)
- Residual: +0.03%

3 Years Excess Return: +0.6%

- Allocation Effect: -0.03%
 - Large Cap Equity tactical underweight (-0.21%)
 - Fixed Income tactical underweight (+0.16%)
- Manager Effect: +0.56%
 - GTAA outperformed due to Bridgewater (+0.34%)
 - Fixed Income outperformed due to F2 and BlackRock portfolios (+0.24%)
- Residual: +0.08%

5 Years Excess Return: +0.1%

- Allocation Effect: -0.08%
 - Fixed Income tactical underweight (-0.15%)
 - Real Estate tactical underweight (+0.11%)
- Manager Effect: +0.25%
 - GTAA outperformed due to Bridgewater (+0.28%)
 - Fixed Income outperformed due to F2 and BlackRock (+0.13%)
 - International Equity underperformed due to Brandes, Hansberger, and terminated managers (-0.13%)
- Residual Effect: -0.08%



Note: Explanatory details of each effect represent the most notable contributions and may not sum to the total effect.



Total Fund Performance

 Goal #3: Achieve a five-year rolling annual rate of return equal to or greater than the projected return expectation in the ASRS Asset Allocation Study.

	5 Year Annualized Return
Total Fund	1.8%
AA Expected Return	8.9%
Excess Return	-7.1%

Goal Met: No



Asset Class Performance vs. Benchmark

3 Year Return

 Goal #4: Achieve annual and three-year rolling annual investment asset class net rates of return equal to or greater than their respective broad asset class

		0 1000 1000011
ASRS Domestic Equity	28%	17.5%
ASRS Custom Domestic Equity Index ¹	3.7%	17.2%
Excess Return	-0.9%	0.3%
ASRS Int'l Equity	-13.1%	7.3%
ASRS Custom Int'l Equity Index ²	-13.9%	7.7%
Excess Return	0.8%	-0.4%
ASRS Fixed Income	8.1%	8.0%
ASRS Custom Fixed Income Index ³	7.5%	7.2%
Excess Return	0.6%	0.8%
ASRS GTAA	2.4%	15.8%
ASRS Custom GTAA Index ⁴	21%	12.0%
Excess Return	0.3%	3.8%
ASRS Inflation-Linked	-13.7%	n/a
ASRS Custom Inflation-Linked Index ⁵	-14.3%	23%
Excess Return	0.6%	n/a
ASRS Real Estate	12.3%	9.8%
NFI - ODCE Index	14.7%	4.1%
Excess Return	-2.4%	5.7%
ASRS Private Equity	15.4%	16.8%
Russell 2000	-0.2%	26.9%
Excess Return	15.6%	-10.1%
ASRS Opportunistic TAA ⁶	2.9%	19.3%

Goal Met: Partially

5ASRS Custom Inflation-Linked Index was 100% Barclays Capital U.S. TIPS through 7/31/2010; 50% Barclays Capital U.S. TIPS, 50% DJ UBS Commodities Index through 8/31/2010; 30% Barclays Capital U.S. TIPS, 70% DJ UBS Commodities Index through 5/31/2011; 100% DJ UBS Commodities Index thereafter.





¹ASRS Custom Domestic Equity Index was S&P 500 through 12/31/2006; 74% S&P 500, 13% S&P 400, 13% S&P 600 through 12/31/2010; 70% S&P 500, 15% S&P 400 and 15% S&P 600 thereafter. 2ASRS Custom Int'l Equity Index was MSCI EAFE through 9/30/2005; MSCI ACWI ex-U.S. through 12/31/2010; 72% MSCI EAFE, 11% MSCI EAFE Small Cap and 17% MSCI Emerging Markets thereafter. 3ASRS Custom Fixed Income Index was Barclays Capital U.S. Aggregate Index through 12/31/2010; 93% Barclays Capital U.S. Aggregate Index, 7% Barclays Capital U.S. High Yield Bond Index thereafter. 4ASRS Custom GTAA Index was 56% S&P 500, 16% MSCI EAFE, 28% Barclays Capital Aggregate through 9/30/2011; 50% S&P 500, 19% MSCI EAFE, 28% Barclays Capital Aggregate, and 3% DJ UBS Commodities Index thereafter.

Manager Performance vs. Benchmark

 Goal #5: Achieve annual and three-year rolling annual portfolio level net rates of return equal to or greater than their respective policy benchmarks.

PUBLIC MARKET	1 Year	3 Years
Outperformers #	19	14
Underperformers #	16	8
Outperformers%	54%	64%

PRIVATE MARKET	1 Year	3 Years
Outperformers #	53	23
Underperformers #	32	40
Outperformers%	62%	37%

1 Year Goal Met: Yes

3 Year Goal Met: Partially



Cash Management

 Goal #6: Ensure all pension benefits, health insurance, member refunds, administrative payments and other requirements are made from available cash balances and without utilizing alternative liquidity options.

			Balance as of 1st
Month	Cash In	Cash Out	Business Day
Jul-11	\$178,103,513	(\$162,908,155)	\$14,144,175
Aug-11	\$216,906,967	(\$165,616,891)	\$46,712,381
Sep-11	\$80,352,410	(\$168,208,098)	\$104,897,890
Oct-11	\$256,461,009	(\$169,518,891)	\$73,648,238
Nov-11	\$222,323,321	(\$170,109,936)	\$57,153,006
Dec-11	\$243,931,683	(\$170,499,953)	\$99,650,526
Jan-12	\$209,964,661	(\$170,410,561)	\$62,160,027
Feb-12	\$222,323,321	(\$170,775,472)	\$57,153,006
Mar-12	\$162,058,749	(\$171,573,237)	\$18,187,174
Apr-12	\$222,928,550	(\$173,038,703)	\$51,683,087
May-12	\$225,140,635	(\$172,714,614)	\$56,981,936
Jun-12	\$223,786,668	(\$172,973,155)	\$38,646,157

All Pension Obligations, Capital Calls and Other Requirements Met with Available Cash





Total Fund Performance Comparisons*

Independent Consultants Cooperative	1 Year	3 Years	5 Years	10 Years	Since Inception 6/30/75
Master Trust - Total Funds	51	12	58	48	n/a
Total Funds - Public Funds	48	10	59	55	n/a
Total Funds over \$1B - Public	32	8	42	66	n/a
Total Funds - Corporate	56	25	61	58	n/a

Callan Associates Inc.	1 Year	3 Years	5 Years	10 Years	Since Inception 6/30/75
Master Trust - Total Funds	46	13	42	46	44
Total Funds - Public Funds	35	6	38	37	33
Total Funds over \$1B - Public	25	7	30	52	33
Total Funds - Corporate	n/a	n/a	n/a	n/a	n/a

Note:

[•]Callan Associates' ranking for Total Funds - Corporate were not available at the time this report was completed.



^{*}The information contained herein is for comparison purposes only and is not a Total Fund performance benchmark. Peer universe comparisons are subject to several limitations, including: peer groups are not comprehensive, several funds are included in multiple peer groups, peer groups are constructed using gross of fee returns and survivorship bias in that poorly performing funds may no longer continue to report results.

[•]Universes are constructed using gross of fee returns; therefore, the ASRS rank is based on gross of fee returns.

[•]Independent Consultants Cooperative's ranking not available going back to 1975 as database was created in 1992.

Economic Environment

- Annualized GDP growth came in at a moderately weak 1.7% in the second quarter, down from 2.0% in the first quarter.
 - Retail sales decreased to a 3.0% year-over-year growth rate in June 2012.
 - The inventory-to-sales ratio has remained relatively flat since the fourth quarter of 2010. Demand must contribute to further growth.
 - Corporate profits as a percent of GDP decreased slightly but are still near secular highs at 12% at quarter end.
 - The U.S. Trade Deficit decreased in June.
- The unemployment rate rose slightly to 8.3% in June; U-6, a broader measure of unemployment, increased to 15.0%.
 - JP Morgan states that sustained GDP growth of 1.5% is needed for positive job creation, and closer to 3% growth is needed to decrease the unemployment rate.
- Consumer confidence decreased during the quarter; the Case-Schiller Home Price Index remains more than 35% off its high levels.
- The 12-month change in the Consumer Price Index was 1.7% in June, down from 2.7% year-over-year in March.
- Fed Funds rate remains at 0.25% while the 10-year Treasury Yield finished June at 1.7%.
- The Fed's assets remained flat in the quarter as its efforts to provide liquidity to central banks leveled off.
- Both U.S. equities and investment grade corporates appear cheap relative to long-term averages, with credit more attractively priced.



Market Environment - Overview

O		<u>Qtr.</u>	YID	<u>1 Yr.</u>	<u>3 Yr.</u>	<u>5 Yr.</u>	<u> 10 Yr.</u>	■ Qtr. □ 1 Yr. -30%	-20%	-10%	0%	10%	20%	30%
Global Equity Benchmarks MSCI World (Net)	World	-5.1%	5.9%	E 00/	11.0%	-3.0%	5.2%			-5.1%				
IVISCI VVOITa (Net)	vvorid	-3.1%	5.9%	-5.0%	11.0%	⊸3.0 %	J.Z/ ₀	MSCI World (Net)		-5.0%				
Domestic Equity Benchmarks														
S&P 500	Large Core	-2.8%	9.5%	5,5%	16.4%	0.2%	5.3%	S&P 500		-2.8%		5.5%		
Russell 1000	Large Core	-3.1%	9.4%	4.4%	16.6%	0.4%	5.7%	Russell 1000		-3.1%		A CONTRACTOR		
Russell 1000 Growth	Large Growth	-4.0%	10.1%	5.8%	17.5%	2.9%	6.0%	100		-4.0%		4.4%		
Russell 1000 Value	Large Value	-2.2%	8.7%	3.0%	15.8%	-2.2%	5.3%	Russell 1000 Growth		-2.29		5.8%		
S&P Mid Cap 400	Mid Core	4.9%	7.9%	-2.3%	19.4%	2.6%	8.2%	Russell 1000 Value				3.0%		
Russell 2000	Small Core	-3.5%	8.5%	-2.1%	17.8%	0.5%	7.0%	S&P Mid Cap 400		-4.9% -2.3%				
Russell 2000 Growth	Small Growth	-3.9%	8.8%	-2.7%	18.1%	2.0%	7.4%	Russell 2000		-3.5%				
Russell 2000 Value	Small Value	-3.0%	8.2%	-1.4%	17.4%	-1.0%	6.5%	Russell 2000 Growth		-2.19 -3.9%				
raccii 2000 varac	Official Value	-0.070	0.270	-11-170	17170	-1.0/0	0.070	X 100 00 00 00 00 00 00 00 00 00 00 00 00		-2.7% -3.0%				
		Qtr.	YID	1 Yr.	3 Yr.	5 Yr.	10 Yr.	Russell 2000 Value		-1.4				
International Equity Benchmarks														
MSCI ACWI ex-U.S.	International	-7.6%	2.8%	-14.6%	7.0%	4.6%	6.7%	MSCI ACWI ex-U.S.	-14.6%	-7.6%				
MISCI EAFE	Int'l Developed	-7.1%	3.0%	-13.8%	6.0%	-6.1%	5.1%	MSCI EAFE		-7.1%				
MSCI EAFE Growth	Int'l Developed	-7.3%	3.9%	-12.6%	7.6%	-4.6%	4.9%		-13.8%	-7.3%				
MSCI EAFE Value	Int'l Developed	-7.1%	2.0%	-15.2%	4.2%	-7.7%	5.3%	MSCI EAFE Growth	-12.69	6				
MSCI Emerging Mkts Free	Int'l Emerging	-8.9%	3.9%	-15.9%	9.8%	-0.1%	14.1%	MSCI EAFE Value	-15.2%	-7.1%				
								MISCI Emerging Mikts Free	-15.9%	-8.9%				
-		Qtr.	YID	<u>1 Yr.</u>	<u>3 Yr.</u>	<u>5 Yr.</u>	<u> 10 Yr.</u>		10.0%					
Domestic Fixed Income Benchman											2	1%		
Barclays Aggregate	Core Bonds	2.1%	2.4%	7.5%	6.9%	6.8%	5.6%	Barclays Aggregate			1.	7.5%		
Barclays High Yield	High Yield	1.8%	7.3%	7.3%	16.3%	8.5%	10.2%	Bardays High Yield				7.3%		
ML U.S. HY BB/B Constrained	High Yield	1.9%	6.4%	7.0%	14.2%	7.6%	8.9%	ML U.S. HY BB/B Constrained			1.	7.0%		
CSFB Levered Loans	Bank Loans	1.0%	4.5%	3.3%	10.1%	3.5%	5.1%	CSFB Levered Loans			1.0)%		
Barclays 1-10 TIPS 90 Day T-Bill	Inflation-Linked Cash	3.2% 0.0%	4.0% 0.0%	11.7% 0.1%	9.6% 0.1%	8.4%	7.2%	Bardays 1-10 TIPS				3.3% 3.2%		
90 Day 1-Bill	Casi	0.0%	0.0%	U. 1%	U. 17 ₀	1.0%	1.9%	- Marina Base Windows			0.09		.7%	
		Qtr.	YID	<u>1 Yr.</u>	3 Yr.	<u>5 Yr.</u>	10 Yr.	90 Day T-Bill			0.19			
Global Fixed Income Benchmarks											_	101		
Citigroup World Govt Bond	Global Bonds	0.9%	0.4%	2.7%	5.4%	7.3%	6.8%	Citigroup World Govt Bond			0.9	r% 2.7%		
BC Global Agg Credit	Global Bonds	0.4%	0.0%	3.5%	7.8%	5.8%	6.8%	BC Global Agg Credit			0.49	% 3.5%		
J.P. Morgan EMBI Plus	Em. Mkt. Bonds	2.8%	6.9%	11.2%	13.4%	9.5%	12.3%	J.P. Morgan EMBI Plus				28%		
		Qtr.	YTD	1 Yr.	3 Yr.	5 Yr.	10 Yr.					11.3	2%	
Alternative Benchmarks					<u> </u>	<u> </u>	10 111			-4.5%				
DJ UBS Commodity Index	Commodities	-4.5%	-3.7%	-14.3%	3.5%	-3.7%	5.0%	DJ UBS Commodity Index	-14.3%	-4.J/b				
NCREIF ODCE Index Lagged	Real Estate	2.8%	5.9%	14.7%	4.1%	-0.4%	6.4%	NCREIF ODCE In dex Lagged				2.8%	14.7%	
Wilshire RETIndex	RET	3.7%	14.9%	13.2%	33.6%	2.1%	10.3%	Wilshire REIT Index				3.7%		
HFRI Fund of Funds	Hedge Funds	-2.3%	1.0%	-4.5%	2.2%	-2.0%	3.2%	HFR1Fund of Funds		-2.39	6	13	3.2%	
HFRI FoF: Conservative	Hedge Funds	-1.2%	1.2%	-2.7%	2.5%	-1.8%	27%			-4 5%	96			
Russell 2000 Lagged	Private Equity	12.4%	29.8%	-0.2%	26.9%	2.1%	6.5%	HFRI FoF: Conservative		-2.7%				
Cambridge PE Lagged	Private Equity	4.7%	6.2%	12.8%	126%	5.6%	3.0%	Russell 2000 Lagged		-0	.2%	1	2.4%	
Cambridge VC Lagged	Venture Capital	5.4%	11.0%	10.8%	18.2%	7.0%	13.3%	Cambridge PE Lagged		•		4.7%	2.8%	
CPI	Inflation	-0.2%	0.7%	1.7%	2.1%	2.0%	2.4%	Cambridge VC Lagged				5.4%		
										n	2%	10.8	3%	
								СРІ		-0		.7%		
											_			



Market Environment

Equities

- After experiencing strong first quarter "risk on" returns, global equity markets reversed course in the second quarter as global economic fears mounted and ended the quarter in negative territory.
- Domestic Equity (S&P 500) outperformed International Equity (MSCI ACWI ex-U.S.) in the second quarter (+4.8%).
 - Contributing to poor performance in the U.S. was a rotation into higher-yielding, lower-beta, and quality growth stocks in a "risk off" market as investors favored more defensive sectors.
 - Telecommunications, utilities, consumer staples and healthcare led the way, while market segments linked to global economic activity, such as financials and technology, declined the most. From a style perspective, value outperformed growth across the market cap spectrum; large caps slightly outperformed small caps, and mid-caps declined the most during the quarter.
 - Globally, growth equity indices struggled during the second quarter as greater political concerns and slowing GDP in China triggered a sell-off. Nevertheless, the quarter ended on a positive note as the European Union announced its willingness to start a process to unify bank oversight in order to shore up confidence in the financial system.
 - Emerging markets declined 8.9% in dollar terms, but dropped 5.3% in local terms signifying that currency relative to the dollar had a negative impact. Within the emerging markets, Latin America and Brazil in particular was hit hardest as a region (-13.2%). The Far East was the best performing region (-7.1%).

Fixed Income

- Long-term U.S. Treasuries led fixed income returns during the quarter as yields touched all-time lows in response to slowing growth in both the U.S. and China. The Treasury yield curve shifted lower, with rates declining the most at the long end of the curve. At quarter-end, two-year Treasuries were yielding 0.3%, 10-year Treasuries were yielding 1.7%, and 30-year Treasuries were yielding 2.8%.
- U.S. high-grade credit led investment grade sectors during the quarter (+2.5%). Financials, which are the best-performing sector to date in 2012 returned 1.9% for the quarter, while industrials and utilities posted positive returns of 2.7% and 3.7%, respectively.
- Emerging market debt was comparatively weaker during the period, particularly issues denominated in local currency. The JP Morgan GBI-EM GD Index, which tracks the performance of local currency emerging markets sovereign bonds, returned -1.2%. Emerging market debt denominated in USD performed better during the quarter, returning 2.8%.



Market Environment

Private Equity

- Based on return data from The Burgiss Group, global private equity posted a return of 3.3% during the first quarter (the most recent period available).
 - Over the 10-year period through the first guarter, global private equity returned 11.2% per annum.
- More than \$65 billion of new private equity commitments were made globally during the quarter, bringing the 2012 total raised to \$129.8 billion. This amount is nearly 60% of the total private equity capital that was raised in 2011, putting 2012 on pace to be the largest year for new private equity commitments since 2008.

Real Estate

- Despite a sluggish and uncertain economic environment, property fundamentals continue to improve.
 - Occupancies and new rental rates are generally increasing, while new development remains extremely limited.
 - Core property fundamentals continued to rebound, with cap rates and property values for some core assets reaching peak levels.
 - Spreads between core real estate income yields and the five-year U.S. Treasury are ∼350 bps and above long-term average spreads.
 - Transaction volumes are back to pre-bubble levels. Significant capital flows, both equity and debt, continue into the core market.
 - Non-core real estate valuations continue to lag and are 30% 40% off peak market pricing.

Commodities

- Commodity returns during the quarter were driven by worries stemming from the European debt crisis as well as weather concerns. Fears of a global slow-down led to uncertainty and selling pressure in industrial commodities, petroleum, and base metals.
 - Crude oil prices fell as U.S. inventories rose and slowing global growth affected prices.



Looking Forward – What To Do in a Low Return, "Risk On/Risk Off" World?

- Diversify broadly many global risks remain
 - Risk balanced -> risk parity
 - Hedge known liabilities and uncompensated risks
- Allocate to attractive segments of risky assets
 - Emerging markets, particularly small cap stocks and local currency debt
 - Credit, particularly less liquid and more complex segments
 - European and other distressed markets
- Be prepared to be dynamic
- Use active strategies to enhance returns



Key Risk: Euro-Zone Debt Crisis – Potential Outcomes

Extension of current approach: "Kick the can down the road"

- ECB offers third LTRO and renews buying of Periphery sovereign debt
- Allow ESFS/ESM support structures to lend directly to Eurozone banks

Progression to a Fiscal Union

- Creation of a pan-Eurozone FDIC
- Some form of Eurozone debt sharing; "Eurobonds"
- Pan-Eurozone stimulus plan

Total Chaos

 Complete dissolution of Eurozone, depression spreading globally, social upheaval, etc.

The situation is very fluid and changes on a day-to-day basis:

- Risk of one or two countries leaving the Euro within the next twelve months has increased meaningfully. Risk can be contained with proper policy response from ECB and remaining Eurozone members
- Requires a <u>political solution</u> and ultimately some form of loss sharing agreement between Periphery and Core Eurozone members
- Rational outcome is some form of fiscal consolidation to protect Spain and Italy
- Lack of political will could lead to destabilizing fracturing of Eurozone



IMD Investment House Views

U.S. Equities

- Despite a fairly sanguine longer range outlook, the near term risks to confidence have risen now that domestic equity indices have recently regained the March-April 2012 price levels.
- Consequently, IMD Equities took advantage of this opportunity to lessen risk exposure somewhat, as well as to move toward revised SAA policy targets by reducing the Domestic Equities asset class by ≈1.5% of Total Fund.
- IMD maintains a tactical overweight in U.S. Equities relative to its policy benchmark and has bias to to U.S. Equities relative to Non-U.S. Developed-Markets (EAFE) Equities.

International Equities

- The near term suggests some caution is also still warranted toward the non-U.S. markets notwithstanding generally resilient fundamental underpinnings.
- Although trailing the U.S. indices year-to-date, there hasn't been wholesale movement into riskier international assets.
 The tactical risk/reward quotient has lessened presently for increasing allocation toward revised SAA policy targets for EAFE and Emerging Markets (EM) equities.
- Should more optimistic expectations be unmet by tangible ECB and EMU movement on Southern Europe's fiscal difficulties, the markets are susceptible through 3Q to retracing some recent gains. Also, economic fundamentals of several EM countries are equilibrating to their own new policies as well as to developed-world forces.
- The ASRS plans to initiate additional allocation to EAFE and EM sub-classes following a market correction or upon greater clarity that the Eurozone problems are at least moving towards resolution
- IMD maintains a underweight in Non-U.S. Equities vs. it policy and favors emerging markets (EM) over EAFE.
 Consistent with that viewpoint, IMD maintains it overweight in EM and underweight in EAFE vs. their respective strategic policy allocations.



IMD Investment House Views

Fixed Income

- Given the current low yields of U.S. treasuries, IMD does not see meaningful return potential at the present time for core fixed income (investment-grade bonds). However, we do see attractive yield and return opportunities in a variety of credit markets including high yield bonds, emerging market debt, private debt and opportunistic fixed income (primarily distressed debt and structured, asset-backed securities).
- The sovereign debt crisis in Europe will continue to pose significant uncertainty for the outlook for risky assets. In addition, the global economy appears to be meaningfully slowing, which could lead to a sell-off in the credit markets.
- IMD views a meaningful sell-off as a potential buying opportunity for riskier asset classes such as high yield bonds and emerging market debt.

Real Estate

- Real estate is benefitting from a gradually improving economy.
- Apartments and hotels are seeing demand return to pre-crash levels. Office and Industrial properties have a positive trend in occupancy, but vacancy rates in many markets are still too high for landlords to have pricing power. Retail is still at record vacancy levels even in an environment where consumer spending is improving, reflecting structural changes in the retail market. For sale housing remains challenged, although public market activity may reflect optimism of a recovery.
- IMD believes continuing dislocations in the debt market present both challenges and opportunities as debtors and creditors continue to work through the necessary process of resolution.

Private Equity

- IMD favors managers focused on mid-market and smaller target companies where multiples continue to be attractive and there is less competition from public debt and equity alternatives; as well as on managers with strong operational skill sets to help target companies grow EBITDA; and has tactically focused on managers with distressed and turnaround skill sets that enable them to capitalize on a deleveraging environment.
- IMD believes in the long term prospects of the natural resources sector and will continue to make investments in this area, as well as considering a tactical increase in focus on secondary funds and potential new initiatives in infrastructure and farmland investments.



IMD Investment House Views

Commodities

- The European debt crisis continues to loom with implications for the USD, and signs of improved navigation or stimulus could provide buoyancy to commodities.
- Ags have endured one of the worst droughts in the U.S. in decades, sending grain prices much higher although, recent data indicates the economy has softened domestically.
- IMD holds a modest underweight as it transitions to the new SAAP (from 3% to 4%) as CPI measured inflation has remained tame and fallen in most developed and emerging countries. Should the Fed provide meaningful stimulus and/or the European crisis move toward a tangible resolution, IMD would move back to policy weight due to signs of improved growth or rising inflation.

Opportunistic

- ASRS has select structured credit and distressed investments made primarily through ASRS opportunistic public fixed income investment managers (separate accounts and GP/LP structures). Opportunistic Private Investments have a policy allocation of 0-3% which resides within ASRS 0-10% SAA aggregate opportunistic investment policy.
- IMD continues to explore relationships with regional real estate operators for additional private opportunistic investments and co-investments with existing partners.



IMD's Activities & Initiatives

- Retained two new high yield (HY) managers; however, funding will occur in the context HY spread valuations.
- Continue to tactically reduce ASRS U.S. equity allocation to bring assets closer to policy target weights.
- Implementation of real estate strategic manager program
 - Manager selected for the Apartment and Industrial in the strategic manager initiative.
 - Final due diligence has commenced for medical office and senior housing partners has commenced.



Strategic Asset Allocation Policy (SAAP) History

- 7/1/75 12/31/79 40% S&P 500/60% Barclays Capital Aggregate
- 1/1/80 12/31/83 50% S&P 500/50% Barclays Capital Aggregate
- 1/1/84 12/31/91 60% S&P 500/40% Barclays Capital Aggregate
- 1/1/92 12/31/94 50% S&P 500/10% MSCI EAFE/40% Barclays Capital Aggregate
- 1/1/95 6/30/97 45% S&P 500/15% MSCI EAFE/40% Barclays Capital Aggregate
- 7/1/97 12/31/99 50% S&P 500/15% MSCI EAFE/35% Barclays Capital Aggregate
- 1/1/00 9/30/03 53% S&P 500/17% MSCI EAFE/30% Barclays Capital Aggregate
- 10/1/03 12/31/06 53% S&P 500/15% MSCI EAFE/ACWI ex-U.S.¹/26% Barclays Capital Aggregate/6% NCREIF ODCE (lagged one quarter)
- 1/1/07 10/31/2009 31% S&P 500/7% S&P 400/7% S&P 600/18% MSCI ACWI ex-U.S./5% Russell 2000 (lagged one quarter)/26% Barclays Capital Aggregate/6% NCREIF ODCE (lagged one quarter)
- 11/1/2009 6/30/2012 28% S&P 500/6% S&P 400/6% S&P 600/13% MSCI EAFE/2% MSCI EAFE Small Cap/3% MSCI Emerging Markets/7% Russell 2000 (lagged one quarter)/24% Barclays Capital Aggregate/2% Barclays Capital High Yield/6% NCREIF ODCE (lagged one quarter)/3% Dow Jones/UBS Commodities Index
- 7/1/2012 Present 23% S&P 500/5% S&P 400/5% S&P 600/14% MSCI EAFE/3% MSCI EAFE
 Small Cap/6% MSCI Emerging Markets/7% Russell 2000 (lagged one quarter)/13% Barclays
 Capital Aggregate/5% Barclays Capital High Yield/4% Emerging Markets Debt/3% Private
 Debt/8% NCREIF ODCE (lagged one quarter)/4% Dow Jones/UBS Commodities Index
- *Interim SAA Policy: 31% S&P 500/6% S&P 400/6% S&P 600/13% MSCI EAFE/2% MSCI EAFE Small Cap/3% MSCI Emerging Markets/4% Russell 2000 (lagged one quarter)/24% Barclays Capital Aggregate/2% Barclays Capital High Yield/6% NCREIF ODCE (lagged one quarter)/3% Dow Jones/UBS Commodities Index

Note: Interim SAA Policy includes a proration of 3% Private Equity, which is unfunded. Private Equity was prorated to domestic equity.

Recently approved Strategic Asset Allocation Policy effective July 1, 2012.

